



Table D-2. Overview of Cowardin Classification System for Wetlands in the Project Area

System	Subsystem	Class	Abbreviation ^a
Palustrine—All nontidal wetlands dominated by trees, shrubs, emergents, mosses, or lichens.	None.	Aquatic Bed—Dominated by plants that grow on or below the surface of the water.	PAB
		Em ergent—Characterized by erect, rooted, herbaceous hydrophytes ^b present for most of the growing season in most years. Usually dominated by perennial plants.	PEM
		Forested—Characterized by woody vegetation that is 6 meters (m) (20 feet [ft]) tall or taller.	PFO
		Scrub-shrub—Areas dominated by woody vegetation less than 6 m tall. Species include true shrubs, young trees (saplings), and trees or shrubs that are small or stunted.	PSS
		Unconsolidated Bottom—Less than 30 percent vegetated cover and at least 25 percent cover of particles smaller than stones.	PUB
Lacustrine—Wetlands and deepwater habitats that are in topographic depressions or dammed river channels; lacking trees, shrubs, and persistent emergents; and greater than 20 acres in size.	1 (Limnetic)—All deepwater habitats within the Lacustrine system; many small Lacustrine systems have no Limnetic subsystem.		L1
	2 (Littoral)—All wetland habitats in the Lacustrine system. Extends from shoreward boundary to 2 m (6.6 ft) below annual low water or to the maximum extent of non-persistent emergents, if these grow at depths greater than 2 m (6.6 ft).	Aquatic Bed—As above.	L2AB
		Unconsolidated Bottom—As above.	L2UB
Riverine—Wetlands and deepwater habitats contained in natural or artificial channels periodically or continuously containing flowing water, or which form a connection between two bodies of standing water.	2 Lower Perennial—Low-gradient, slow-flowing streams with no tidal influence. Some flow is present throughout the year. Floodplains on these streams are well developed and the substrate is mainly sand and mud.	Unconsolidated Bottom—As above.	R2UB
	3 Upper Perennial—High-gradient, fast-flowing streams with no tidal influence. Some flow is present throughout the year. There is very little floodplain development and the substrate consists of rocks, cobbles, or gravel with occasional patches of sand.	Unconsolidated Shore—Shorelines that have unconsolidated substrates with less than 75 percent cover of stones, gravel, or bedrock; and less than 30 percent cover of vegetation; and are flooded for some portion of the year.	R3US

Definitions based on information from USFWS Classification of Wetlands and Deepwater Habitats of the United States (Cowardin et al. 1979). Notes:

Additional modifiers describe subclass and hydrologic regime.

Hydrophytes are plants adapted to living in saturated soils (Cowardin et al. 1979).